

SOME NEW SOUTH AFRICAN SUCCULENTS AND OTHER
PLANTS. PART IV.

BY R. MARLOTH, Ph.D., M.A., F.R.S.S.Af.

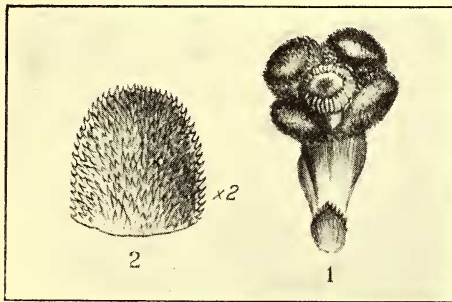
(Read May 17, 1911.)

Among the plants described in this paper are three species of special interest, viz., one of *Cytinus*, one of *Borbonia*, and one of *Anacampseros*. The *Cytinus* is noteworthy as it constitutes a second species of Rafflesiaceæ for South Africa, the *Borbonia* is of economic importance, being the source of a colonial tea, viz., rooibosh tea, and the *Anacampseros* is another example of a mimicry-plant, of which eight species were described in the previous papers.

RAFFLESIACEÆ.

CYTINUS CAPENSIS, spec. nov.

Planta 10-12 cm. alta, dioica; caulis squamis ovatis, brunneis obtectus; inflorescentia mascula terminalis, racemoso-corymbosa, pauciflora. Flores



CYTINUS CAPENSIS, Marl.

1. Flower of Male Plant. Nat. size.
2. Segment of Perianth. $\times 2$.

saturate-sanguinei, 4-partiti, segmentis concavis, rotundatis, fimbriatis, tomentosis. Planta feminea ignota.

This plant was found growing on the roots of a shrub (*Metalasia muricata*) in the Cape Flats. The stems are only 4–5 in. high, just reaching to the surface of the sandy soil and showing the flowers almost flush with the ground. The colour of the flowers is a dark claret, the pollen is nearly white. In our other species, *C. dioicus*, the flowers are bright orange, about twice the size, 6-parted, and more tubular.

It appears to be very rare, for only two groups of it were found by Mr. E. Dyke, although, having learnt from me what an interesting find he had made, he searched the locality repeatedly. Flowering in August in the Cape Flats near Zeekoe Vley. Marloth, No. 4978.

Up to the present three species only of this interesting genus were known, viz., one in the Mediterranean region, one in Madagascar, and one in South Africa.

PORTULACACEÆ.

ANACAMPSEROS ALBISSIMA, spec. nov.

Caudex brevis, depressus; caules plures recurvi, densissime stipulis albissimis obtekti. Stipulæ spiraliter adpressæ, breviter ovatæ, retusæ, non-laciniatæ, basi angustatæ et barbata. Folia succulenta, brevissime-renata. Flores ignotæ. Capsula globosa.

Stems pure white, 1–4 cm. long and 4 mm. thick, more or less recurved. Stipules broadly ovate, entire, very concave, each stipule holding the leaf next above it in its hollow. Leaves 2 mm. broad and 1 mm. long.

This plant has the habit of *Anacampseros papyracea*, but differs from it (1) by its smaller size (about one-half) and thinner stems, (2) the shape of the stipules, which are shorter in proportion, (3) the shape of its leaves, which are broader than long.

The flowers remain enclosed within the apical stipules as in *A. papyracea*, but produce fruits. The stalks of the capsules lengthen on ripening sufficiently to free them from the surrounding stipules.

This species is like *A. papyracea*, a mimicry-plant, for both occur only, as far as known, on fields of white quartz. The latter species is found in several districts of the karroo, but neither myself nor any of the other collectors who have sent it to me did meet with it in other surroundings. The same is the case with this species, which I found in several localities of German South-West Africa, but only on reefs or outcrops of pure white quartz, where the plant could be detected only with great difficulty.

LEGUMINOSÆ.

BORBONIA PINIFOLIA, spec. nov.

Frutex bipedalis, foliis simplicibus, teretibus, filiformibus. Flores racemosi, parvi; calyx subregularis, 5-dentatus, *Rafnia* similis; corolla

lutea sed carina et vexilli apex sericeæ. Ovarium bi-ovulatum. Legumen lineare, acuminatum, seminibus duobus.

This plant has the appearance of a *Rafnia*, but on account of the structure of the ovary and the silky corolla it must be placed into the genus *Borbonia*. Here it does not fit into either of the two groups formed by Harvey in the Flora Capensis, for only the alæ are glabrous.

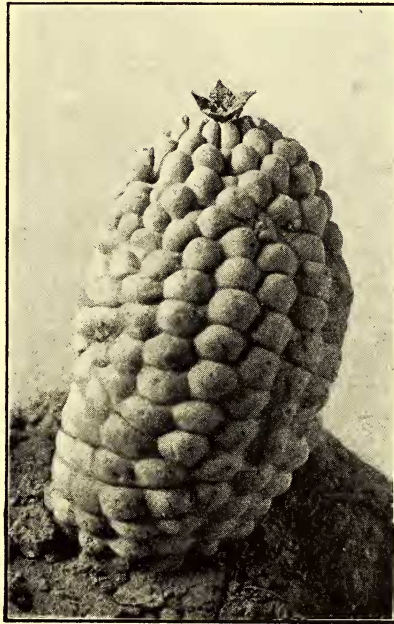
The plant is of special interest, as it supplies the "Tsoibosh-tea," which is now so largely used in South Africa either under this name or as "naald-thee" or "koopmans-thee." The shrublet occurs apparently only on the Cedar Mountains near Clanwilliam and Wupperthal.

Flowering December-January. Marloth, No. 4728.

ASCLEPIADACEÆ.

TRICHOCAULON MELOFORME, spec. nov.

Caulis simplex subglobosus vel e basi paullo-ramosus, ramis globoso-



TRICHOCAULON MELOFORME, Marl.

$\frac{2}{3}$ Nat. size.

ovatis. Caulis ramique mammillis obtusis obtecti. Flores ex areolis superioribus, 1-3, breviter pedicellati. Corolla rotato-campanulata, tubo

2-3 mm. longo, lobis abrupte-angustatis, apice recurvis, superne maculis fusco-purpureis tectis. Coronæ exterioris segmenta profunde bipartita, lobis acutis, valde arcuato-divergentibus. Coronæ interioris segmenta linearia antheris incumbentibus, arcuato-elongatis, apice haud divergentibus, basi longe-cornutis.

The plant is 2-3 in. high, nearly globose, the stems solitary or 2-3 from the same root; the slightly raised tubercles of the surface are without bristles, greyish green; the flowers appear at the apex, 1-3 from the same point, opening in succession. The tube of the corolla is shallow, cup-shaped, the segments are broadly ovate, abruptly and shortly acuminate, the points when the flower has just opened recurved, but later on suberect. The points are dark-maroon, while the base of the corolla-lobes and the visible portion of the tube are yellow, speckled with dark-maroon markings. The outer side is a dark claret. The outer corona is quite similar to that of *T. cactiforme*, the lobes of two neighbouring segments arching towards each other and forming a pair of mandibles. The inner corona, however, differs from that species by its elongated lobes, which reach to the level of the outward corona segments and also bear an anterior curved process, which stands between the two "mandibles," almost touching their tips. The size of the flowers varies according to the state of the plants, for in robust specimens they may be 10 mm. in diam., while in others they are only 6 mm.

Found between weathering granite-boulders near Aus in German South-West Africa (alt. 1,400 m.) and flowering in my garden at Capetown in March, 1911. Marloth, No. 4874.

A few years ago only one species of *Trichocaulon* without bristles was known, viz., *T. cactiforme*, but the Flora Capensis (vol. iv., Part 1, page 889, published in 1909) brought two others of this group, and shortly afterwards a third one, also sent to Kew by the writer, was named *T. pictum*; hence within a few years the number of species of this section has risen from one to five.

They are all very similar in habit, hence in order to facilitate their recognition I attach the following brief synopsis.

- A. Segments of outer corona bipartite, each segment being formed of 2 almost independent lobes.
 - a. Inner corona-lobes not produced beyond the anthers 1. *T. cactiforme* (Hook), N.E.Br.
 - b. Inner corona-lobes produced beyond the anthers.
 - 1. Inner corona-lobes with a conspicuous anterior horn, standing between the segments of the outer corona 2. *T. meloforme*, Marl.
 - 2. Inner corona lobes without a dorsal appendage 3. *T. Marlothii*, N.E.Br.*

B. Segments of outer corona deeply 3-lobed.

a. The middle lobe shorter than the lateral lobes,
entire 4. *T. simile*, N.E.Br.

b. The middle lobe broader than and nearly as long
as the lateral lobes, bifid 5. *T. pictum*, N.E.Br.

* This species appears to be very similar to, or identical with, one from Great Namaqualand, described by Berger as *T. Dinteri* (Stapelien und Kleinien, p. 30, 1910).

There is another species of this group mentioned in the same book, viz., *T. pedicellatum* Schinz, but without a description of the corona.

IRIDACEÆ.

GLADIOLUS FLORENTIÆ, spec. nov.

Planta acaulis. Cormus globosus, fibris mollis obtectus. Folia 2-3, subsecunda, breviter-lanceolata, striata, glabra. Racemus pauciflorus, subsessilis. Flores 2-5, lutei, spathis viridibus, segmentis subæqualibus.

This pretty little plant resembles in its foliage almost a *Babiana*, but the leaves are neither plicate nor hairy. The flowers are nearly 2 in. long and 1 in. wide at the mouth, of a deep golden yellow, otherwise of the typical structure of *Eu-Gladiolus*.

Frequent in stony ground of the Karroo near the Great Tygerberg in the district of Prince Albert. Flowering in May, 1907. Marloth, No. 4452.